# CALIFORNIA DEPARTMENT OF TRANSPORTATION DUTY STATEMENT

PARF 51-5-022

CLASSIFICATION TITLE	DISTRICT/DIVISION/OFFICE	
Senior Transportation Planner (Specialist)	HQ/Division of Traffic Operations	
	Office of Performance	
WORKING TITLE	POSITION NUMBER	EFFECTIVE DATE
Performance Measurement Specialist	913-350-4724-xxx	
Monitoring and Analysis Branch		

As a valued member of the Caltrans team, you make it possible for the Department to improve the mobility across California by being innovative and flexible; reporting to work as scheduled; working cooperatively with team members and others; and treating others fairly, honestly and with respect. Your efforts are important to each member of the team, as well as those we serve.

# **GENERAL STATEMENT:**

Under the general direction of the Chief, Office of Performance, the Sr. Transportation Planner is the Performance Measurement Specialist in the Monitoring and Analysis Branch. The incumbent has primary responsibility for all support and development efforts for the Performance Measurement System (PeMS) software. The incumbent is additionally responsible for reaching out to stakeholders to both train them in the use of PeMS, and to obtain feedback to ensure that PeMS continues to meet the performance measurement needs of the Traffic Operations and Planning programs. PeMS is a traffic data collection, processing, and analysis tool for assessing the performance of the transportation system. PeMS obtains 30-second vehicle detector count and occupancy data from over 39,000 individual lane detectors in real-time from the Transportation Management Centers in Caltrans. PeMS enables the Department to measure successes towards system performance goals and targets.

### **TYPICAL DUTIES:**

Percentage Job Description

- 35% (E) Directly responsible for ensuring that the production instance of the Caltrans PeMS is operational and that new versions of the PeMS software are transferred in a timely and systematic manner to the production instance of PeMS. Works closely with and supervises the work of the PeMS application support contractor. Responsible for coordinating with the Traffic Operations Office of Technology and with the Division of Information Technology (IT) to plan for PeMS hardware needs. Coordinates with the IT database administrator and system administrators to monitor the performance of the existing hardware and make sure any issues are addressed. Manages the research instance of PeMS located at the University of California, Berkeley, including overseeing its operation and planning for future needs related to conducting research and testing new features for PeMS.
- 30% (E) Responsible for using PeMS to analyze data and provide performance measures such as vehicle hours of delay, travel time reliability, detector health for various departmental reports, including the Quarterly Performance Measures Report, the quarterly Traffic Operations High Level Performance Measure Dashboard, the monthly Vehicle Detection Reliability report, the Mile Marker, and other reports as requested. Advises management on the use and development of new performance measures, including those related to measuring congestion and reliability as required

by Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) Act, related to the Division of Traffic Operations Strategic Plan and the Caltrans Strategic Plan. Responsible for preparing reports, issues papers, emails, and other types of correspondence as necessitated by management; developing and delivering presentations to division, district management, customers, and performing special assignments as directed.

Responsible for advising and assisting customers in determining the availability and quality of traffic data available for performance measurement in PeMS. Responsible for assisting public and private sector customers in retrieving information from PeMS, including establishing web and Value Added Reseller (VAR) accounts, helping users find the relevant report pages for instructing public and private sector customers in the usage of PeMS by the most appropriate means available including: phone, computer, or through in-person presentations and training. Manages the creation of user support materials such as FAQ's and manuals.

- Manages all support, development, and research efforts involving PeMS. As a project/contract manager, initiates, develops, directs, and oversees all consultant contracts for the Caltrans PeMS. Includes a contract for the support and maintenance of the PeMS software, as well as contracts to develop new features to determine the most effective application of PeMS in support of the Department's traffic management and system planning efforts. Develops both short- and long-term project plans, status reports, etc. Responsible for engaging public and private sector customers about their usage of PeMS for developing effective strategies for conducting this outreach. Outreach is necessary to identify how customers use PeMS to collect feedback about potential changes that customers would like to see in PeMS, with the goal of maximizing the use of the system information in PeMS to understand system performance, plan for system needs, and identify the most beneficial projects to improve mobility, accessibility, and reliability. Uses the feedback collected from users to create a work plan for the future development of PeMS.
- 10% (M) Coordinates with the Division of Traffic Operations Budgets & Administration Office and the Division of Transportation Planning State Planning & Research (SPR) Branch to manage the resources allocated to PeMS through the SP&R Part I Program. Responsible for monitoring expenditures, ensuring the personal services and operating expense allocations for PeMS are utilized to their fullest capacity; must complete annual program requests and year-end reports to meet SPR requirements for continued funding.

### **SUPERVISION EXERCISED OVER OTHERS**

None. May function as the lead worker to Associate Transportation Planner and Transportation Planner working on PeMS, and provide advanced technical expertise in the operation of PeMS.

## **KNOWLEDGE, ABILITIES AND ANALYTICAL REQUIREMENTS**

Must have knowledge of database creation and application; transportation performance measurement; geographic information systems (GIS) structure and application; highway, local roadway, rail, and bus system operations; and all associated aspects of operations involving goods movement. This position requires working knowledge of quantitative and qualitative analytical methods, project management, and the dissemination of performance measurement information through appropriate channels. This position also

requires knowledge of intelligent transportation systems (ITS) applications and technologies, especially methods and technologies for collecting traffic data.

Must have working knowledge of design, application, evaluation and research methods associated with the following: IT'S; traffic operations; transportation planning; traffic data collection, storage and usage; traffic detection; economic analyses; and performance measurement.

Must have knowledge of the Department's mission, vision, goals, organization, policies, and procedures, planning process, and contracting process.

Must possess the ability to gather, compile, analyze, and interpret technical data and articulate that material to a general, non-technical audience. Must also possess the ability to not only effectively communicate (both orally and in writing) with other state and federal agencies, regional and local governments, private industry, universities, and others in the national and international ITS and general transportation community, but also possess the ability to develop innovative communication techniques to present performance measurement information effectively.

# CONSEQUENCE OF ERROR/RESPONSIBILITY FOR DECISIONS

Comprehensive and accurate traffic data and performance metrics are the foundation of the State's transportation system management efforts. This position requires decisions and actions that are both appropriate and sound in pursuit of the Department's mission, vision, goals, and objectives. Must ensure that all work performed is complete, accurate, timely, and of the highest quality. Failure to carry out these responsibilities in the prescribed fashion may result in:

- Loss of State and/or Federal funding
- Reduction in State Transportation System Performance
- Project Delays
- Unfulfilled Need for Improved Traffic Data and Data Analysis
- Increased Travel Delays for People and Goods
- Increased Expenses Resulting From Lost Transportation System Productivity

## PUBLIC AND INTERNAL CONTACTS

The incumbent has frequent contact with personnel from Department Headquarters and District Divisions of Traffic Operations, Transportation Planning, Information Technology, and Research, Innovation, and System Information. The incumbent also has regular contact with consultants, researchers, and private sector data providers. Personnel include: Division Chiefs, Deputy Division Chiefs, Office Chiefs, Program Managers, Senior Technical Staff, Research Professors, Researchers, and Business Consultants.

The incumbent has occasional involvement/contact with personnel from Metropolitan Planning Organizations, Local Departments of Transportation, Regional Transportation Planning Agencies and members of National Boards, Programs and Research Centers such as the Transportation Research Board (TRB), American Association of State Highway and Transportation Officials (AASHTO), and the Texas Transportation Institute.

The incumbent serves as the technical and analytical expert for all activities associated with the Department's Performance Measurement System (PeMS). The incumbent therefore must be sensitive to the complex range of contacts and communication and must have the adaptability to work with and communicate with people at all levels, including technical experts, Department and external top-level managers, members of Legislative bodies, and the general public.

# PHYSICAL, MENTAL AND EMOTIONAL REQUIREMENTS

May be required to sit for long periods of time using a keyboard and video display terminal. Incumbent must be able to interact with many people. It is important that the incumbent work with others in a cooperative manner. Incumbent should be able to deal effectively with pressure, maintain focus and intensity yet remain optimistic and persistent, even under adversity. Incumbent must be able to adapt behavior and work methods in response to new information, changing conditions, or unexpected obstacles.

Must have ability to create and sustain an organizational culture that encourages others to provide high quality of service, and have strong communications and listening skills in order to identify and communicate customer needs and expectations.

Must behave in a fair and ethical manner toward others and demonstrate a sense of responsibility and commitment to public service. Incumbent must value cultural diversity and other individual differences in the workforce

Must have the ability to multi-task, adapt to changes in priorities, and complete tasks or projects with short notice. Incumbent should be able to concentrate in order to review and create documents and meet strict deadlines at times. Incumbent must grasp the essence of new information and master new technical and business knowledge that will meet the directives of the Division. Incumbent should understand new and long-range plans and be able to determine how to position PeMS to integrate the use of its transportation information in the Department's planning and project development process.

### WORK ENVIRONMENT

Working hours will be set sometime between 6:00 a.m. and 6:00 p.m. on weekdays. The incumbent will primarily work in a high-rise building. While at the office designated at the base of operation, the incumbent will generally work in a climate-controlled office under artificial light. Incumbent may be required to work outdoors and may be exposed to dirt, noise, uneven surfaces, and/or extreme heat or cold. Incumbent may also be required to attend, participate and assist with presenting outdoor demonstrations of deployable products. On occasion, the incumbent may be required to travel to various parts of the state to give presentations, provide training, or attend workshops and conferences with internal and external customers.

Employee Name (please print)	Employee Signature	Date
I have discussed the duties with and provided	a copy of this duty statement to the employee na	amed above.
Supervisor Name (please print)	Supervisor Signature	Date